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Communicable disease Assignment

300level

1. Communicable Diseases

- *Definition*: Communicable diseases are illnesses caused by pathogens (bacteria, viruses, parasites, fungi) that can be transmitted from one person to another, either directly or indirectly.

- *Causative Agents*: Bacteria (e.g., TB, Cholera), Viruses (e.g., HIV, Influenza), Parasites (e.g., Malaria, Schistosomiasis), Fungi (e.g., Ringworm)

- *Modes of Transmission*:

    - Direct: Person-to-person contact, droplet transmission

    - Indirect: Contaminated food/water, vectors (mosquitoes, ticks), fomites

- *Methods of Prevention and Control*:

    - Vaccination, sanitation, hygiene, vector control, education, isolation/quarantine

2. Endemic, Epidemic, and Pandemic

- *Endemic*: Constant presence of a disease in a population (e.g., Malaria in Nigeria)

- *Epidemic*: Sudden increase in disease cases (e.g., Cholera outbreak in a community)

- *Pandemic*: Global spread of a disease (e.g., COVID-19, Influenza A/H1N1)

3. Incidence and Prevalence

- *Incidence*: Number of new cases in a population over a period (e.g., 100 new HIV cases in a year)

- *Prevalence*: Total number of cases (new and existing) in a population (e.g., 1000 HIV cases

in a community)

- *Importance*: Incidence helps identify outbreak sources; prevalence informs resource allocation and planning

4. Controlling Communicable Diseases

- *Measures*:

  - Surveillance, contact tracing, vaccination, sanitation, hygiene, education, vector control

  - Isolation/quarantine, treatment, health promotion

5. Short Notes

- *a. Epidemiological Triangle*: Agent-Host-Environment interaction leading to disease

- *b. Vehicle-borne Transmission*: Disease transmission through contaminated food, water, or other vehicles

- *c. Point Prevalence and Period Prevalence*:

  - Point Prevalence: Cases at a specific point in time

  - Period Prevalence: Cases over a defined period (e.g., annual prevalence)